IN THE SPECIFICATION:

Please amend the Specification as follows.

On page 5, please amend the second paragraph beginning on line 15 to read as follows:

Even at a time interval like this objects may move, which makes the positioning result worse. Due to the possibly large movement of the objects, the strengths of the signals measured by the receivers may vary from the lowest limit of a signal to being observed rapidly up to the upper limit of the dynamic area of the receivers. The variation may be significant especially in small distances, since the strength of a measured signal is vice versa proportional to the third power of the distance of objects. In addition to this, the same transmitters may be used in different measurements for objects for very different sizes and located in different distances in relation to the transmitters. The repeated succeeding of the measurements to be made in different situations requires that the strengths of the transmitter signals measured by the receivers constantly remain within certain limits. The problem has been solved by using an adjustment algorithm which controls the power of the transmitters in such a way that the amplitudes of the signals measured by all the receivers remain above a certain lowest limit and below a certain upper limit. The return switching, or feedback, of the transmitter signals has been described e.g. in patent publication US5747996.

On page 9, please amend the last paragraph beginning on line 31 to read as follows:

The strengths of the transmitter signal amplitudes to be observed in the receivers may be adjusted by return switching, or feedback, in which one takes into account the signals measured by the whole set of receivers. In this way, a sufficient signal noise ration is ensured in every measurement situation.

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On Page 11, line 4, please insert the following section heading and paragraph:

BRIEF DESCRIPTION OF THE DRAWING:

Figure 1 illustrates a measuring device arrangement in accordance with the present invention.

On page 11, please amend the last paragraph beginning on line 27 to read as follows:

In addition in the drawing there is shown the return switching, or feedback, AGC controlling the transmitters as an input to which there are the final measured signal amplitudes $\hat{u}_k$. Based on the obtained amplitudes, the return switching, or feedback, controls the transmission power of the transmitters so that the signal-noise ratio constantly remains on the desired level in order to achieve the best possible measurement result. Further, in the drawing there is shown a filter AF, which is arranged in between the receivers 1, ..., k and the output of the measuring device in order to filter the singals transmitted by the transmitters from the actual useful signal $s_k(t)$.

On page 14, please amend the second full paragraph beginning on ling 17 to read as follows:

The return switching, or feedback, AGC is implemented by calculating the RMS values of each measured signal from time interval T over the set of transmitters 1 . . .K and by adjusting based on this the transmission power of individual transmitters so that the maximum of the estimated signal components over the set of receivers remains approximately standard.